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Effectiveness of the Tees Valley Food Hygiene Award Scheme towards Food Business Operators and Consumers in the Middleborough District

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Abstract

A cross-sectional study was conducted to evaluate the Middlesbrough Council ‘Tees Valley Food Hygiene Award Scheme’ among 131 consumers and 56 food business operators from different wards in Middlesbrough, were interviewed concerning awareness and effectiveness of the scheme. The findings from the survey clarified that the scheme is not fully effective. This study showed that awareness levels of consumers are low and food business operators are higher. The scheme has had no significant effect in influencing consumers to choose food businesses to eat at by star-rating, but a significant association ($p < 0.01$), where it has influenced food business operators in making improvements to their businesses.

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1. Introduction

The importance of the hygiene awareness issue amongst food business operators and consumers has been chosen to be addressed, on account of hygiene complaints about food business premises and the

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growth of numerous food businesses without adequately controlling their hygiene standards within the Middlesbrough area. Thus, it is hoped that this study will achieve two main hypothesis goals such as the scheme will have a positive effect on food business operators in all categories of star-rated premises and a higher percentage of awareness, effectiveness and impacts of the scheme. For consumers, it is expected that they will choose to eat only at hygienic food businesses due to star rating. In Middlesbrough district, an A grade indicated poor hygiene standards and an E grade, high hygiene standards. This is also supported by the Food Standard Agency (FSA) (2005) UK in the Survey of Hygiene Standards in Food Premises, which reported that 13% of the premises revealed major non-compliances with hygiene law and 46% showed some non-compliance in law or the industry code of practice. Furthermore, it has been recognized across the UK that there are frequent food poisoning cases related to poor hygiene practices in particular, poor handling practices among food handlers, which can cause illness and even death to humans (Hughes *et al.*, 2007; Health Protection Agency, 2007).

Concurrently, it was found that a majority of the public are now eating more in restaurants, cafes, take-aways and other food business establishments, owing to most of their customers being working parents, or having an active lifestyle and requiring convenient food with good taste, at a suitable price (Thompson *et al.*, 2005; Mintel, 2007). In Britain, society's lifestyle has changed due to economic stability. This situation has triggered consumers to check how clean these food businesses or kitchens may or may not be (Worsfold, 2005a; Food Standard Agency, 2007).

As a result of poor hygiene standards, a national scheme, known as, 'Scores on the Doors', was introduced, with voluntary participation from local authorities throughout the UK. This scheme is purposely designed to promote excellent hygiene and food safety management standards in food businesses, encourage competition among restaurant or food business operators, control consumer choice and improve consumer knowledge concerning the hygiene of food premises (Griffith, 2005a; Scottish Consumer Council, 2007; Worsfold, 2005a; Jin and Leslie, 2003).

2. Literature Review

2.1. Food Scares in Britain

In England, it was estimated that the average amount spent on food in one household is more than £2000 per annum (Hughes *et al.*, 2007, p.766). As Thompson *et al.* (2005) stated "consumption of food is one of the most intimate relationships mankind has with the environment". This condition has contributed to 'foodborne illnesses'. Griffith (2006b) explained that, "foodborne disease includes illness caused by various chemical, physical or microbiological hazards, which may be present in food or water".

The Health Protection Agency (HPA), Communicable Disease Surveillance Centre (CDSC) reported that general outbreaks of infections intestinal disease (IID) have risen. From 1992 to 2003, there have been 7620 outbreaks in England alone (Hughes *et al.*, 2007, p.767). This gastro-intestinal disease problem occurred to a great extent in 2000; there were 634,568 foodborne disease cases, with 407 deaths in England and Wales (Health Protection Agency, 2007; Hughes *et al.*, 2007; Yen *et al.*, 2005).

The common types of microbial pathogen related to foodborne infection include *Salmonella*, *Campylobacter*, *E.coli* and *C.perfringens* (Health Protection Agency, 2007). Across Europe, it has been agreed that contamination of food sources came from the food service and retail sectors (Manning and Baines, 2004; Seaman and Eves, 2006). Existing research by Hughes *et al.*, (2007) discussed that the majority of outbreaks were associated with commercial catering premises, such as canteens, halls, hotels, restaurants, public houses or bars and shops.

An FSA survey found that approximately 82% of foodborne illnesses were attributed to when the public consumed food outside the home (Scottish Consumer Council, 2007). Notably, findings from Unusan (2007) illustrated that consumers were concerned about take-away food for home consumption. Worsfold (2005a), however, described the awareness level of food poisoning cases, as low.

In response to this, this scheme implies “a scheme where food hygiene information is made available at point of sale to the final customer, although it could be supported by web-based systems”.

2.2. Importance of Implementing Food Hygiene Award Scheme

There is an alarming importance placed on hygiene and safety at a national and a global level, therefore, preceding research found that awareness is principally being placed on “prevention through hygiene” (Bloomfield, 2000), to control and decrease the rate of foodborne illness cases, economic burden and social pressure.

The paramount problem encountered, was that half of the catering and restaurant establishments breach food safety law, which was discovered by environmental health officers (EHO) during their inspection (Worsfold, 2005a). The current condition shows that the “punishment of closures is unusual and rare” (Worsfold, 2005a). In fact, the reality is that the community was not informed of hygiene inspection results, or the reason that the food businesses failed to meet hygiene standards.

In a popular study, Griffith (2005a) demonstrated that consumers have created a new environment between “demand” and “pull” food businesses, to influence them to manage and mainly implement food safety accordingly. Moreover, Richard Lodge (2006) stated that “It’s been an uphill struggle for many years to get food businesses to take responsibility for food safety rather than just waiting for an inspector to call and give them a list of things to do” (Chartered Institute of Environmental Health (CIEH), 2007).

Evidence has been outlined in a number of publications, which believe that the ‘Scores on the Doors’ scheme will provide benefit in several categories. These are associated with the General Food Hygiene Regulation (EC) 852/2004, enforcement officers, regional and international levels, food businesses and consumers.

The ‘Tees Valley Food Hygiene Award scheme’ intends to provide a proper framework and ensure that food is safe to eat throughout all aspects involved in producing, processing and selling food to consumers. It is also educating food business operators and consumers about hygiene awareness (Griffith, 2005a; Scottish Consumer Council, 2007).

Thus, it would encourage all food businesses “to move beyond legal compliance” (Worsfold, 2005a), by implementing and promoting food safety and structural standards; followed by all food handlers being trained in hygiene and demonstrating HACCP principles, based on a documented food safety management system (Worsfold, 2005a). In addition, this scheme will motivate food business operators to improve their hygiene level and, at the same time, should raise their income (Worsfold, 2005a).

By publishing transparency data regarding hygiene standards for consumer information and food businesses, the scheme would assist the EHO in enforcing related regulations and save time mentioned by Barry Heywood, cited in Worsfold (2005a) and Griffith (2005a). The essential advantage of hygiene awareness is the ability to identify poor hygiene practice performance, with the national scheme ‘Scores on the Doors’, as a benchmark and, subsequently, providing basic data on a regional or international level to control food handler activities (Griffith, 2005a). In the UK, at governmental level, Worsfold (2005a) discussed the hygiene award scheme as one way for the strategy to enhance food safety management practised in food businesses. Moreover, from the same research, it was found that there were no excessive burdens on local councils from this national scheme, because it is based on routine inspection.

A valuable study from Jin and Leslie (2003), using data from hospitals, predicted a 20% decline in foodborne disease cases. The foremost reason was that hygiene quality had improved amongst food business operators and consumers’ knowledge had improved. Several studies have demonstrated that the hygiene award system will encourage competition among restaurant or food business proprietors, due to preferences of the consumer. It will build the reputation of food businesses regarding their star award (Jin and Leslie, 2003; Worsfold, 2006b). Another reward factor is to elevate staff motivation, as a tool by revealing food premises’ hygiene standards (Worsfold, 2005a).

The facts have suggested that displaying the hygiene award as a result of an inspection, will reveal food business safety information and give the consumer a choice (Scottish Consumer Council, 2007; Griffith, 2005a). Fundamentally, consumers are concerned about a “reliable system” (Worsfold, 2006b) that can assist them in judging the hygiene standards of food premises (Worsfold, 2006b). Jin and Leslie (2003) have proven that giving this information to the consumer will affect their behaviour. In other words, consumers would avoid eating at unhygienic premises (Griffith, 2005a).

2.3. Impact on Food Businesses

Research from Jin and Leslie (2003) has indicated that displayed information will lead to competition among food businesses, encourage consumers to eat at their premises and enhance product quality. Furthermore, many restaurants made hygiene improvements after they obtained hygiene awards (Jin and Leslie, 2003). A survey showed that nearly 90% of food businesses are aware of the scheme in Scotland (FSA, 2007). This is because a majority of food businesses desire awards (Worsfold, 2005a). However, a lack of information regarding hygiene awards discouraged food businesses from achieving the highest rating (Worsfold, 2005a).

Research has argued that the attitude factor is significant for food handlers, besides enforcement and knowledge, to ensure positive behaviour of excellent hygiene practice and the trend of foodborne illness (Bas *et al.*, 2006; Toh and Birchenough, 2000).

Eves and Dervisi (2005) proposed that motivation has been recognized as vital. Proof from Worsfold (2005a) stated that the UK award schemes are firmly boosting business confidence and “acting as a valuable tool for staff motivation”, where criteria to achieve the highest standard in the award was that all staff must be trained in food hygiene, explained Kirby and Gardiner (1997) cited in Worsfold (2005a).

2.4. Impact on Consumers

Based on a consumer survey, the majority of consumers claimed that it was difficult to find information about the hygiene level of the food premises where they choose to eat (Worsfold, 2006b).

In addition, Jin and Leslie (2003) stated, firmly, that the provision to let consumers know hygiene information is likely to impact on consumer behaviour. As mentioned in a Mori-Kimberly Clark Professional survey, many consumers (84%) selected would not return to food business premises if they identified it as unhygienic, even if the price and quality of food was reasonable (Worsfold, 2005a) and 70% would not buy food from them (Worsfold, 2006b). Similarly, in Scotland, more than half (64%) of consumers would not buy any food if food businesses had ‘not displayed’ their certificate.

However, an argument from Jin and Leslie (2003) indicates that consumers are ‘insensitive’ to the restaurant hygiene scheme, possibly because there is no information available to them about the benefits of eating in a hygienic place, or the implication of food poisoning.

3. Methodology

3.1. Research Design

A cross-sectional study was conducted from July to September 2007 on ‘Tees Valley Food Hygiene Award Scheme’ awareness and effectiveness of food business operators and consumers in the Middlesbrough district. All the participants answering the questionnaire were anonymous and was informed the purpose of the survey.

3.2. Participants

3.2.1. Food Business Operators

This survey was conducted in July 2007 involving sixty food business operators within the Middlesbrough area based on the star rating award, which is available on the official website (<http://www.scoresonthedoors.org.uk/>). A list was printed from the 'Scores on the Doors' website, which included 0 to 5-star-rated premises. From this list, the top ten food businesses in each star rating category were selected. These were labelled A to J, under the heading 'MAP' (Table 1).

Table 1. Food premises according to category and map

Star premise	Map	Total of premise
5 star	A,B,C,D,E,F,G,H,I,J	10
4 star	A,B,C,D,E,F,G,H,J,K	10
star	A,B,C,D,F,G,H,J,L,M	10
2 star	A,B,C,F,G,J,K,L,M,P	10
1 star	A,B,C,D,E,F,G,H,I,J	10
0 star	A,B,D,E,F,G,H,K,L,M	10

3.2.2. Consumers

One hundred and thirty-one consumers took part from 23 wards in Middlesbrough. Consumers were selected to participate after they had eaten at food business premises, or had consumed food at a food establishment nearest to their area.

3.3. Questionnaire Design

A self-administered questionnaire was developed for this study with multiple choice questions. The questions were designed into two categories, which were, 'Food Safety Awareness for Food Business Operators' and 'Food Safety Awareness for Consumers', in the Middlesbrough area.

3.3.1. Questionnaire Design: Food Business Operator

The questionnaire for food business operators was divided into seven aspects. They included the Food Hygiene Award certificate, awareness of the scheme, opinion regarding their own (food business operators) star rating, council communication, usage of the scheme website and impacts of the scheme.

3.3.2. Questionnaire Design: Consumer

The 'Food Safety Awareness: Questionnaire to consumers' embraced 5 categories; customers' awareness of the scheme, the Tees Valley Food Hygiene certificate awareness, usage of the scheme website and impact of the scheme. For demographic characteristics such as customers' age, gender, and areas where they came from, an ethnographic technique was applied to save the customers' time.

3.4. Questionnaire Delivery

3.4.1. Questionnaire Delivery: Food Business Operator

Questionnaires for food business operators were distributed by post (6) along with an official letter of consent and a follow up call was made to ensure that the forms has been returned. They replied in

approximately a week and were included in the survey as results. The rest of the food business questionnaires were completed by face to face interviews at the premises.

For face to face interviews, questions were read to the interviewee, while the researcher filled in the answers, or they could read it for themselves. Interviews were carried out during working days and depended on the time when their shops opened. In each food business premises, the questionnaire was delivered to the manager or supervisor, who had agreed to contribute. The answers were collected from that person on the day, or left for one day, as they wished. Because some of them were not around or busy, and if they get by post, they were asked to return the form in a prepaid envelope to Middlesbrough Council.

3.4.2. Questionnaire Delivery: Consumer

This questionnaire is different from the food business operator's version. This questionnaire was distributed randomly and conducted in a face to face interview with the consumer. Questions were asked after consumers had eaten, or were waiting for their food order or people who have experienced eating outside, due to some places not providing food business. Interviews occurred on week days and weekends. The same method was implemented, where questions were read out and answers filled in by the researcher.

3.5. Data Analysis

The analysis of questionnaires was performed using SPSS software (SPSS Inc. Chicago, IL; version 13.0). Data analysis was carried out with descriptive statistics using frequencies, percentages, mean and standard deviations. A Chi-square test was also used to determine significance between two variables, to measure the impact and determined at the level of $P \leq 0.05$.

An assessment of the food business category was undertaken, as essential information during the conducted survey. Food establishment premises, such as restaurants, cafés, canteens, pubs, clubs, supermarkets, hypermarkets, small retailers, hotels and take-aways were used. All these categories were based on the definition of premises in the Food Standard Agency (FSA): UK Survey of Hygiene Standards in Food Premises 2005.

From the way questions were designed, each correct or positive answer was given points and negative points referred to rating premises: 'no scheme', 'not bothered', 'decrease in numbers of customers' and 'bad idea about the scheme'. Furthermore, '-2' was awarded for 'not respond' to questions. Below are all variables, definitions and codes involved in this study, which were given points.

4. Results and Discussion

A review by Thompson et al. (2005) pointed out that most of the public think that recent food is more hazardous, when compared to before and there is a marked decline in consumers' believing that there have been improvements relating to food safety and food hygiene. The current study by Worsfold (2006b) shows that food hygiene has made consumers more aware of the choice of hygienic restaurants.

A demographic characteristic of consumers consist four questions (gender, age, study areas and where customers came from), for gender (females were the highest participants with 54.2%). According to Mintel (2007), statistics showed the actual fact was that many females are working (46%) and this factor leads them to take an opportunity to eat and order from outside, particularly in town, because they have a wide choice of food businesses. This is followed by age category, showing that those of 26 years of age mostly ate out. As previously discussed, regarding the implications of society's current lifestyle, this trend may be caused by the economic demands of working mothers and fathers. It is likely that this situation has impacted on dining habits (Thompson *et al.*, 2005; Mintel, 2007). This has meant a rise in the fast food and take-away market (Mintel, 2007). Three areas in the study (Linthorpe, University and Coulby

Newham) achieved a similar percentage of consumers (7.6%), depending on where consumers were based (many customers were in Middlesbrough, owing to the high number of food businesses) and most consumers came from Middlesbrough.

The majority of Middlesbrough consumers' awareness was low (Table 2), where most customers (57.3%) had heard about the 'Food Hygiene Award Scheme', followed by the 'Scores on the Doors Scheme', with 22.9% and 'Bronze Star Award' (19.1%). These three answers (Food Hygiene Award Scheme, Scores on the Doors Scheme, with and Bronze Star Award) indicated awareness, while, answers to the six choices of what customers thought that 'Scores on the Doors/Food Hygiene Award' was about, illustrated that less than half of the customers did not recognize that the scheme main points are about food safety, cleanliness of premises, compliance with the law and hygiene standards.

Table 2. Food Business Operators and Consumers concern about awareness and effectiveness of the scheme

Awareness			
Food Business Operators	'YES' responses (%)	Consumers	'YES' responses (%)
Received certificate	83.9	Heard any scheme (22.9%,57.3%, 19.1%)	Low
Displayed certificate	64.3		
Opinion of hygiene standard	55.4	Think about the scheme (44.3%,54.2%,31.3%,62.6%)	Low
Council communication	17.9	Certificate awareness	59.5
Effectiveness			
Usage of the scheme website	26.8	Usage of Council website	9.9
Impacts of the scheme:		Impacts of the scheme	19.8
Changes made	46.4		
Numbers of customers (no change responses)	87.5		
Public asking for star rating	46.4		

However, nearly 60% of consumers stated that they knew all food businesses in the Middlesbrough area had received the Tees Valley Food Hygiene Award Certificate. With this information, they have proved that they are really concerned about the hygiene inspection result (Worsfold, 2006b). As Worsfold (2005a) stated, the disclosure of information regarding hygiene standards and safety of individual food businesses to the consumer was the main aim of hygiene awards.

Furthermore, it is unlikely to be noted in the survey, that most of the consumers showed that they had never accessed the Council's website (90.1%) to check food business star ratings. This is proven by Worsfold (2005a), who explained that society's awareness will be constantly low, even if more information was provided; nevertheless they may become more aware when numbers of award-winners increased. Another foremost reason behind this is that it can be assumed that many people only assess food on aesthetic values, such as taste, colour and appearance (Edwards *et al.*, 2003). These situations lead to failure in implementing the 'Tees Valley Food Hygiene Award Scheme' (Scores on the Doors), as a tool to give consumers information on where they can eat. On the other hand, a contrasting situation exists in Scotland, where the 'Food Hygiene Information Scheme' succeeded in changing consumers' behaviour in not buying any food from food businesses that did not display their certificate (64%) (Food Standard Agency, 2007; Jin and Leslie, 2003).

To the question, "has the scheme affected where you choose to eat?", 19.8% of customers' responses were that it had affected their decision, while 77.1% responded, 'No' and 3.1% did not respond to this

question. By looking at this situation, it has been supported by Jin and Leslie (2003) that consumers are 'not sensitive' to the hygiene award scheme. Nevertheless, a survey by Mori-Kimberly Clark Professional argued that the scheme will impact on consumer behaviour, such as not buying at unhygienic food businesses (Jin and Leslie, 2003; Worsfold, 2006b; Worsfold, 2005a). However, the favourite reason stated by consumers was they were concerned about their food being safe.

The actual scenario across Britain was that most media sources and local authorities achieved their target, to tackle and influence consumers' interest in the scheme such as launching the scheme ceremony and publishing in the newspaper, were a good way in conducting the public towards the scheme (Thompson et al., 2005).

From this survey, all food business premises were classified into types of premises. It showed that restaurant/café/canteen (35.7%) and take-away (17.9%) were the largest sample of premises. In addition, the results of the Chi-square tests indicated no relationship between star rating of premises ($p > 0.05$). However, the results have demonstrated that the 'prepared food' category, in premises such as restaurant/café/canteen (0 star to 5 stars) and take-away (0 star to 4 stars), included each category of star rating. In a previous study, star rating of premises categories, such as restaurants/café/canteens and take-aways, were linked to outbreaks such as food poisoning (Hughes et al., 2007; Bas et al., 2007; Lin et al., 2005).

To overcome this problem, this study found that almost 84% of food business operators were awarded a Food Hygiene Award Certificate, sent out in March 2007, in Middlesbrough, however, 16.1% declared that they had not obtained it. This situation is open to argument, because all food business operators under the 'Tees Valley Food Hygiene Award scheme' database should have received their certificate. It is rational to discuss this matter, in relation to many food businesses that only achieved lower stars ratings (0 stars to 4 stars), which may influence them to take the action of hiding their certificates. Even if displayed, a Tees Valley Food Hygiene Award Certificate is not a legal requirement for food businesses in the Middlesbrough area. On the other hand, the Chi-square analysis indicates a positive awareness of star rated premises towards FBOs displaying certificates, relating to this topic ($p < 0.01$). The bar graph (Fig. 1) shows that 5 star rated premises were displaying their hygiene certificate, but 0 star premises to 4 star premises were less likely to display their certificate. FSA (2007) and the Denmark Smiley-scheme (2007), suggested that food businesses were worried if consumers stayed away from them. This study, therefore, noticed that more than 50% of food business operators were really aware of their hygiene standards and safety food at their premises.

Findings showed that 55.4% of FBOs believe that their star rating accurately represents the hygiene standards in their premises. When analysing, it can be seen that most of the answers given by FBOs stated that their food business premises should have achieved more stars, because of cleaning and improvements that they had made. There is a relationship between the star rating of premises and what the FBOs think about the hygiene standards that their star rating represents ($p < 0.03$) (Fig.2). It has also been found that FBOs of 5 star premises thought their star rating accurately represented the hygiene standards of their premises, but premises with other star categories did not agree. FBOs of premises with a 1 star rating, for example, believed that their star rating did not represent their hygiene standard. From this scenario, it can be suggested that Middlesbrough Council should increase hygiene awareness amongst food business operators in the lower star categories to achieve maximum required standards and understanding. As we know, there are many take-aways that are not owned by local people, some of whom cannot speak English fluently. If the Council sends leaflets or information without explaining their importance, it is possible that they might, unintentionally be ignored, or thrown away.

Relationship between Middlesbrough Council and food business operators was indicated as a very low percentage (17.9%). Most food business operators did not contact the Council. This can be predicted, due to all of them having been posted information regarding the scheme, before it was launched (*Your Local Council Newspaper* SUMMER, 2007 p.19).

In order to evaluate the effectiveness of the scheme, a food business operators' survey illustrated that nearly 73% confirmed that they never been on the scheme website. It could be understood, that this was because a majority of them received their own certificates from Middlesbrough Council. Furthermore, there is no relationship between premises' star rating and whether the FBOs checked the scheme website ($p>0.05$) (Fig. 3). As a consequence, many food businesses were not interested in becoming familiar with the Food Hygiene Award website. In the UK, the hygiene scheme was expected to persuade food businesses to comply with food law and act as a tool in encouraging food handlers (Worsfold, 2005a; Griffith, 2005a; (Ministry of Family and Consumer Affairs, Danish Veterinary and Food Administration, 2007). It allows a judgement to be made, on the extent to which the scheme website for both participants is not being utilized. However, most FBOs' reasons why they accessed the scheme website, was higher, mainly, to 'check the star ratings of other food business', which was around 23.2%, followed by the answer, 'out of interest', or 'to see how the information was displayed on the internet'.

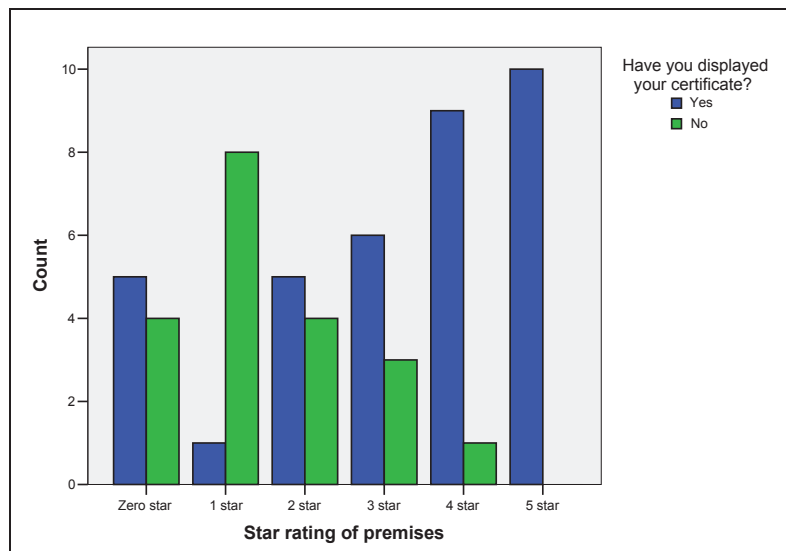


Fig. 1. Awareness of the scheme certificate: relationship between start rating of premises and FBOs displaying certificate

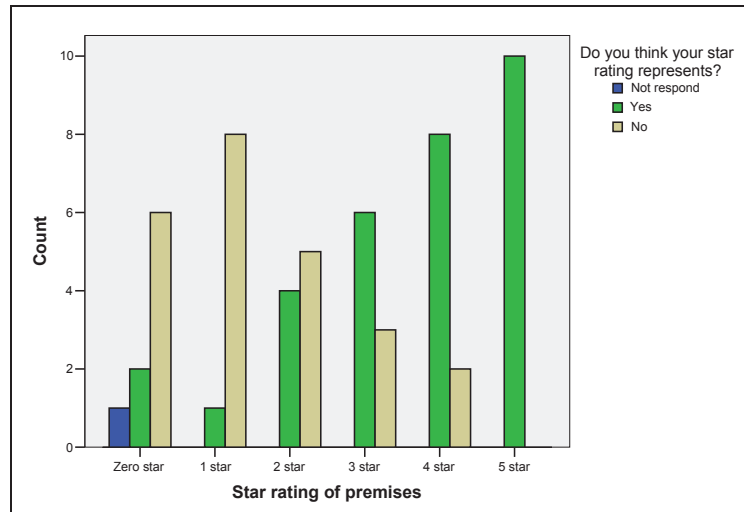


Fig. 2. Hygiene standard in food business premises: relationship between star rating of premises and what FBOs think about their star rating

The results indicate that the ‘Tees Valley Food Hygiene Award Scheme’ was influencing food business operators to compete with other food businesses. There is a relationship between star rating of premises and changes made after receiving award ($p < 0.01$) (Fig. 4). This condition has been proved by several previous studies, where the scheme encourages competition among food business proprietors (Jin and Leslie, 2003; Worsfold, 2006b). A review by Worsfold (2006b) recommended that councils “need to interpret the scoring system to make it meaningful to them”.

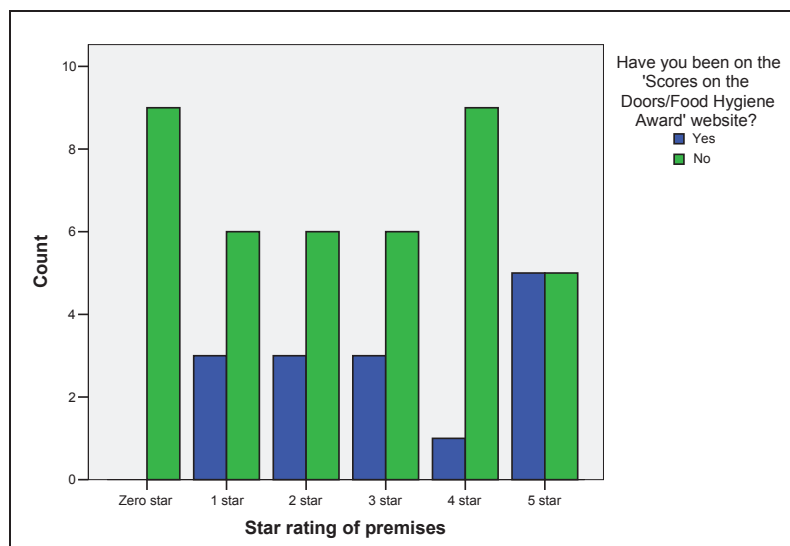


Fig. 3. Usage of the scheme website: Relationship between star rating of premises and FBOs accessing the scheme website

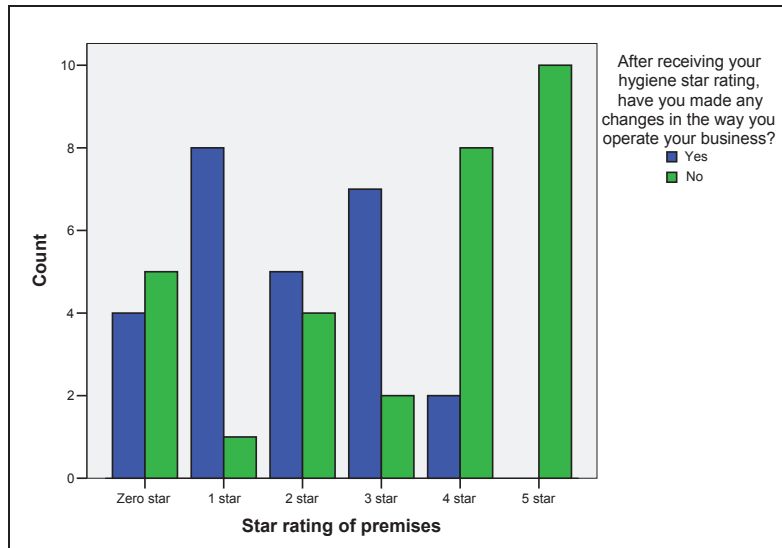


Fig. 4. Impacts of the scheme: changes made after awards

A study conducted by Worsfold (2005a) asked whether the scheme had the potential to increase food hygiene standards in the area where it is implemented. From all points that have been discussed, it indicates, clearly, that the possibility of maintaining food hygiene standards in the Middlesbrough area is low. Based on the questions to customers about whether the scheme affects where they choose to eat, most consumers are still not being selective about eating at either 5 star-rated premises or 0 star-rated premises ($p>0.05$) (Fig. 5). One of the most popular studies relating to this field (Worsfold, 2005a) mentioned that “public awareness of the award scheme is essential for the scheme success” and disclosing information to consumers helped them to avoid less hygienic premises (Griffith, 2005a). There is no relationship between star rating of premises and members of public asking for food premises star rating ($p>0.05$) (Fig. 6).

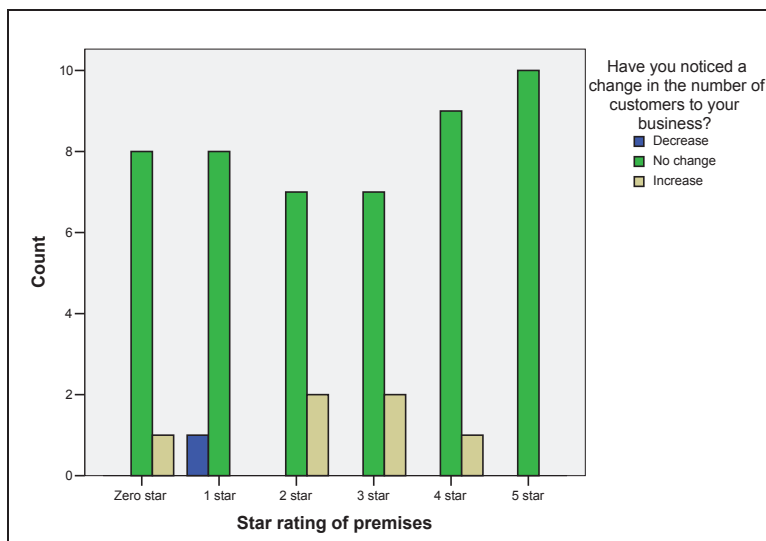


Fig. 5. Impacts of the scheme: numbers of customers

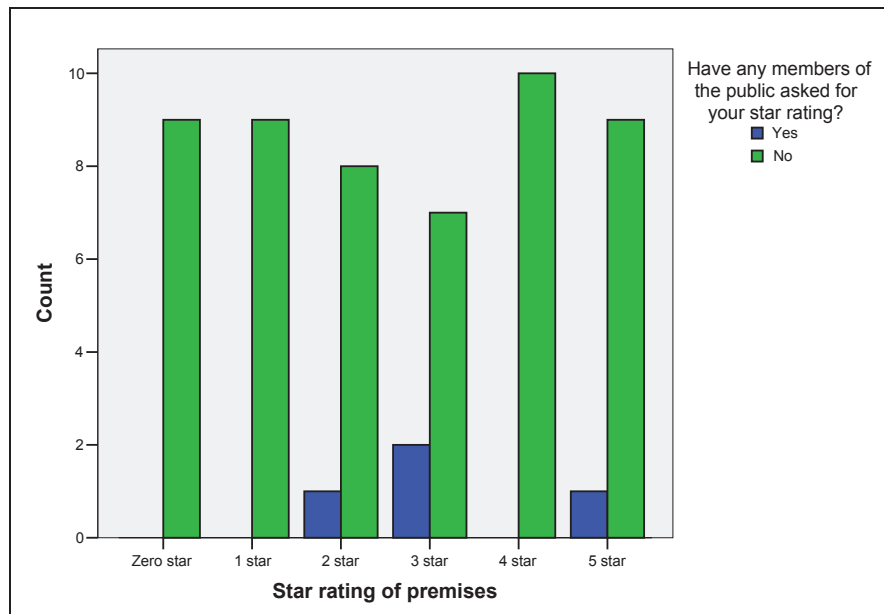


Fig. 6. Impacts of the scheme: Public asking for star rating

The result of the evaluation indicated that the scheme is not fully implemented, in terms of low awareness of the scheme between food business operators and consumers. In contrast, the study found that both participants highly supported the scheme, but, the scheme did not really affect food business operators and consumers, which is represented as a low percentage. There were, however, also hints on making improvements, based on the upgrading of their premises and by following law standards, after the star awards are received. This action to improve their hygiene requirements was deliberate, as they also desired to achieve a higher star rating and build a better reputation (Worsfold, 2006b; Jin and Leslie, 2003). The ultimate point that satisfied all local authorities, consumers and food business operators was that the scheme will treat everyone equally, as it can be a guide in assessing food premises for enforcing a reliable system for consumers, to appreciate and recognize food businesses which are hygienic (Thompson *et al.*, 2005; Worsfold, 2006b; *Your Local Council Newspaper* SUMMER, 2007, p.19).

5. Conclusion

In conclusion, the main finding of this study demonstrated that the implementation of the 'Tees Valley Food Hygiene Award Scheme' has not been fully achieved for food business operators and consumers in the Middlesbrough area. This study showed that awareness levels of consumers is low and food business operators is higher. In addition, both participants are aware of the scheme award certificates. Analysis of the data indicates that application of the scheme website was low for food business operators and consumers, since the scheme was launched. It is important to note that the scheme did not influence or impact them, where there was no change in food businesses relating to numbers of customers and customers asking about their star rating, since the introduction of the scheme. Consumers were also not significantly indicating that the scheme was influencing where they chose to eat. However, most of the 0 star to 5 star ratings categories have made changes in the way they operated after receiving the 'Tees Valley Food Hygiene Award'. Nevertheless, Middlesbrough food business operators and consumers, still have an opportunity to improve, as long as both of them take up the challenge to implement the 'Tees

Valley Food Hygiene Award Scheme', as it offers them more benefits and incentives for long-term planning.

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